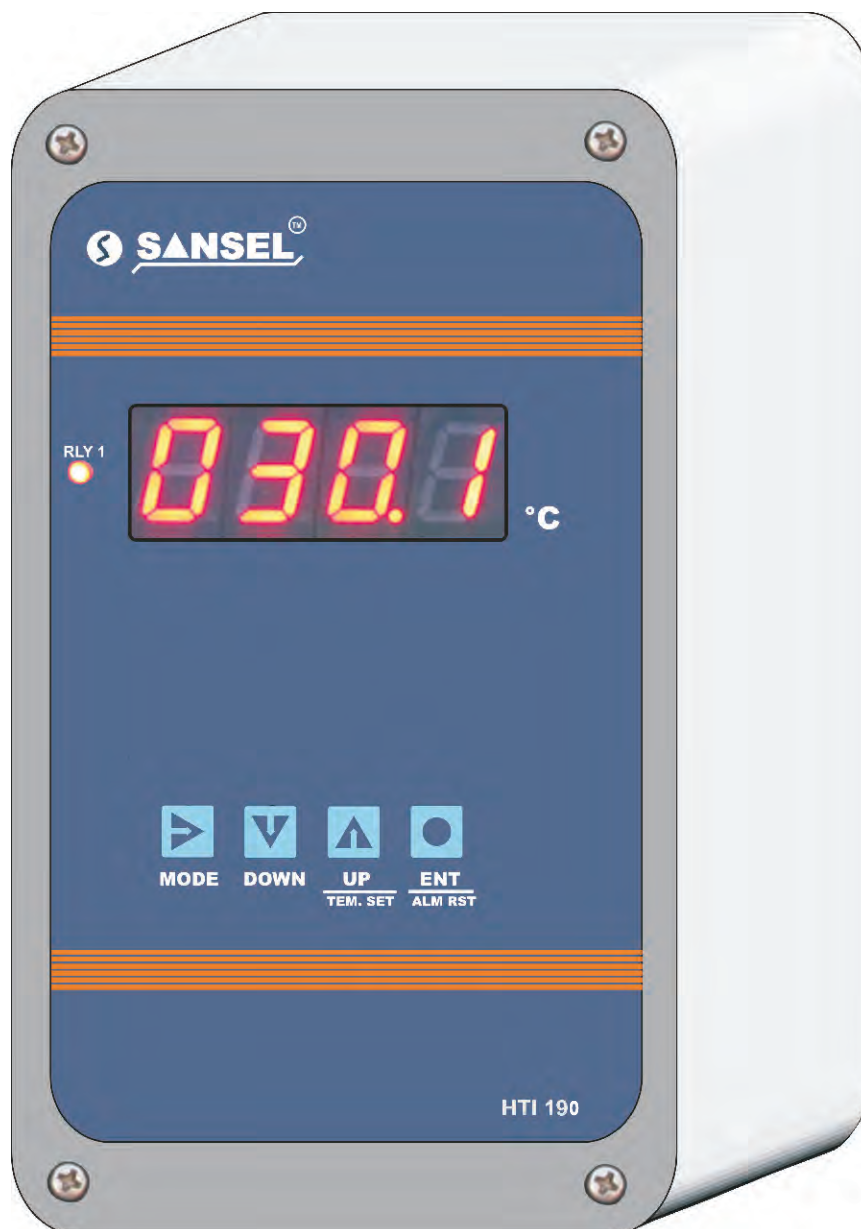


USER MANUAL

**TEMPERATURE INDICATOR
WITH SENSOR, WALL MOUNTABLE
Model : HTI 190**



1. Introduction

Measurement of relevant Climatic data is becoming more and more important. This Temperature Indicator offer Very Accurate Measurement of Temperature by Excellent readability of the very High intensity Seven Segment LED Display.

The Temperature Indicator Housed with roughest Case allow the use in tough industrial environments, Latest Technology and well Proven Sensor Guaranteed Highest Accuracy and Long Term Stable Measurement.

2. Specification

Model	HTI 190
Display	4 Digit 0.5" Seven Segment LED Display
Range * *	0-60 °C
Resolution *	0.1 °C
Accuracy	± 0.3°C
Mounting	Wall mountable
Dimension W x H x D	100 x 250 x 60 mm
Operating Temp. & Humd.	0 - 50°C / 20 to 95 % RH Non Condensing
Power Supply	90 to 270V AC / 50Hz
Weight	1 kg(Approx.)

Note: * Temperature resolution is provided on customer request 0.1°C or 0.01°C with different measuring

* * Temperature range (0 to 60°C, -40°C to 60°C , -40°C to 85°C and -40 °C to 125°C)

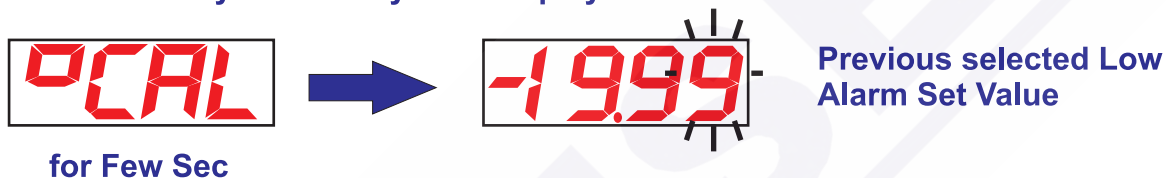
4. Alarm Setup (optional)

4.1. Temperature High & Low Alarm

4.1.1 : To View the Temperature High Alarm Value , Press **▲** TEM. SET key for Few Sec till the Temperature Display Shows



4.1.2 : To Change the High Alarm Value , Press **▲** UP and **▼** DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press **▶** MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by **■** ENT Key. The Display Shows Low Alarm Value as



4.1.3 : To Change the Low Alarm Value , Press **▲** UP and **▼** DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press **▶** MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by **■** ENT Key and the Display Automatically Return back to Read Mode.

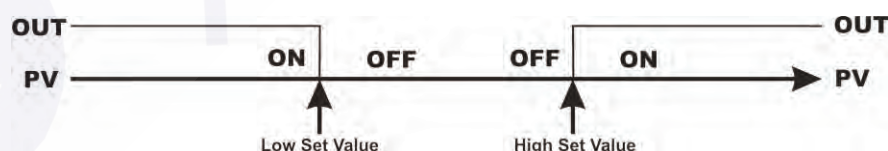
NOTES:

1. IF READ EXCEEDS THE ALARM HIGH OR LOW SET THE DISPLAY WILL GET FLASH.

2.DURING DISPLAY FLASH RESET THE ALARM BY PRESSING **■** ALM RST KEY FOR 3 SEC TILL THE FLASH STOP.

3.AUDITABLE BUZZER AND RELAY OUTPUT OPTIONS ALSO AVAILABLE BY CUSTOMER REQUIREMENT.

4. ALARM RELAY WILL WORKS ON FOLLOWING “HIGH LOW” MODE ONLY.



5. USER CALIBRATION

NOTE : DON'T ENTER IN THIS MODE WITHOUT MASTER EQUIPMENT AND OPERATE BY TECHNICAL PERSON, WHO IS FAMILIAR IN USING ELECTRONIC INSTRUMENTS WITH THE HELP OF USER MANUAL.

5.1. TEMPERATURE CALIBRATION

5.1.1 : To View the ZERO ADJUST Value of Temperature , Power OFF the Instrument and Power ON by pressing ▲ TEM. SET key till the Temperature Display Shows



5.1.2 : To Change the ZERO Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Display Shows SPAN ADJUSTMENT Value as



5.1.3 : To Change the SPAN Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

For further clarification kindly contact us.



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USER MANUAL

ENVIRONMENTAL MONITORING SYSTEM

HUMIDITY , TEMPERATURE & PRESSURE
WITH DATA LOGGER & COMMUNICATION INTERFACE
Model : HTP 196



1. Introduction

Measurement of relevant Climatic data is becoming more and more important. This Humidity ,Temperature & Pressure Indicator offer Very Accurate Measurement of Relative Humidity ,Temperature, Pressure by Excellent readability of the very High intensity Seven Segment LED Display.

The Humidity ,Temperature & Pressure Indicator Housed with roughest Case allow the use in tough industrial environments, Latest Technology and well Proven Sensor Guaranteed Highest Accuracy and Long Term Stable Measurement.

2. Specification

Model	HTP 196
Display	4 Digit 3 Line 0.5" Seven Segment LED Display
Range **	0-60 °C / 0 -100%RH / 0 - 50 Pascal or 0 - 2000 mbar
Resolution *	0.1 or 0.01°C / 0.1%RH / 0.1 Pa or 1 mbar
Accuracy ***	± 0.3°C / ± 1.5%RH / ± 0.5 % FS
Alarm Output (optional)	2 Relay 5A rated with Individual H / L Settings(ONLY FOR HUMD. & TEMP.
Mounting	Wall mountable
Dimension W x H x D	100 x 250 x 60 mm
Operating Temp.& Humd.	0 - 50°C / 20 to 95 % RH Non Condensing
Power Supply	90 to 270V AC / 50Hz
Weight	1 kg(Approx.)

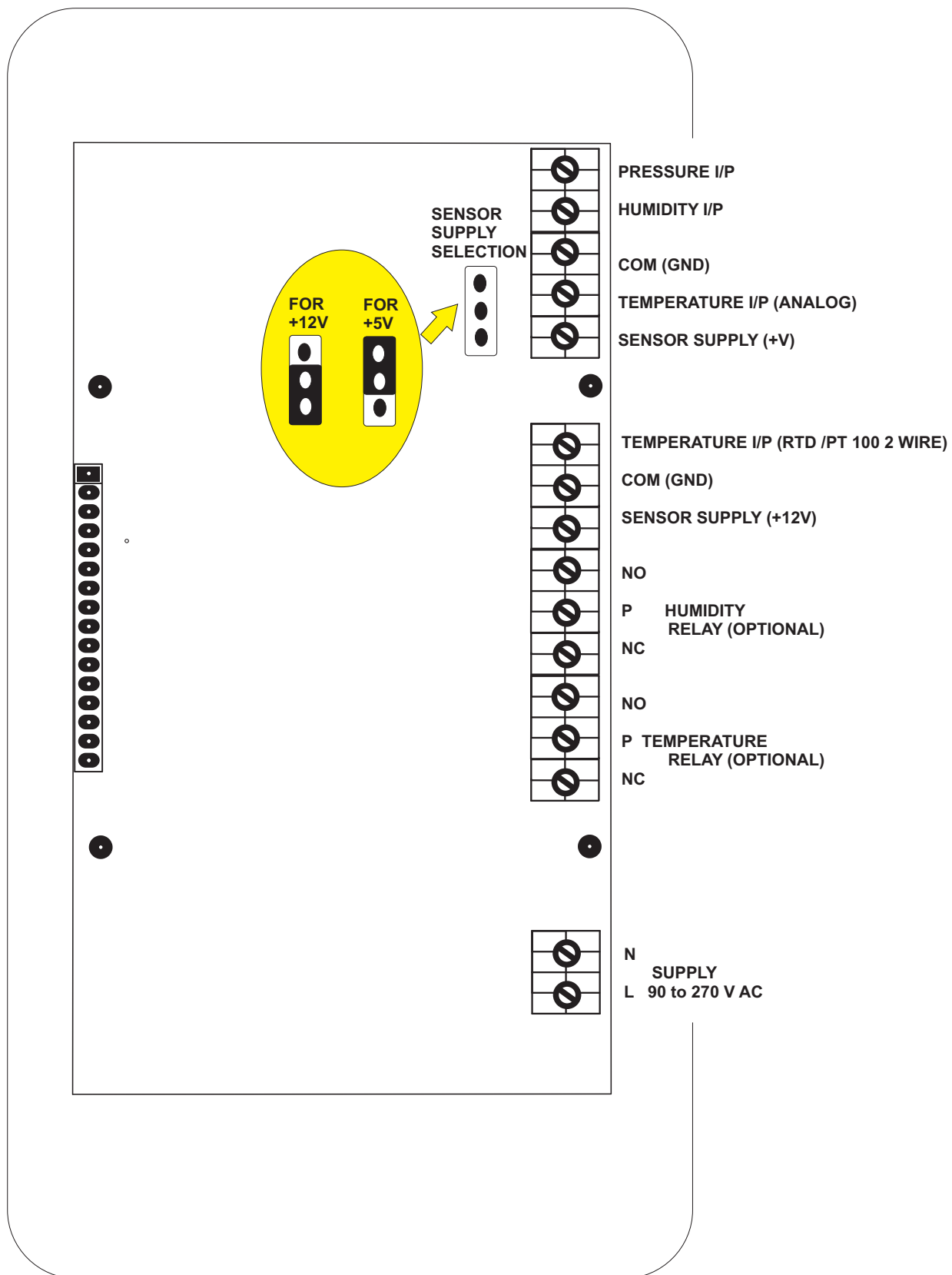
Note: * Temperature resolution is provided on customer request 0.1°C or 0.01°C with different measuring

** Temperature range (0 to 60°C, -40°C to 60°C , -40°C to 85°C and -40 °C to 125°C)

*** Different Humidity accuracy sensor is provided on request (± 5%, ± 3%, ± 2% & ± 1.5% of FS)

Due to continuous product improvements, Published specifications may change with out notice

3. Terminal Arrangement



4. Alarm Setup (optional)

4.1. Temperature High & Low Alarm

4.1.1 : To View the Temperature High Alarm Value , Press  TEM. SET key for Few Sec till the Temperature Display Shows



4.1.2 : To Change the High Alarm Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key. The Display Shows Low Alarm Value as



4.1.3 : To Change the Low Alarm Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key and the Display Automatically Return back to Read Mode.

4.2. Humidity High & Low Alarm

4.2.1 : To View the Humidity High Alarm Value , Press  HUM. SET key for Few Sec till the Humidity Display Shows



4.2.2 : To Change the High Alarm Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key. The Display Shows Low Alarm Value as



4.2.3 : To Change the Low Alarm Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key and the Display Automatically Return back to Read Mode.

4.3. Pressure High & Low Alarm

4.3.1 : To View the Pressure High Alarm Value , Press  PRES. SET key for Few Sec till the Pressure Display Shows



4.3.2 : To Change the High Alarm Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key. The Display Shows Low Alarm Value as



4.3.3 : To Change the Low Alarm Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key and the Display Automatically Return back to Read Mode.

NOTES:

1. IF READ EXCEEDS THE ALARM HIGH OR LOW SET THE DISPLAY WILL GET FLASH.
- 2.DURING DISPLAY FLASH RESET THE ALARM BY PRESSING  ALM RST KEY FOR 3 SEC TILL THE FLASH STOP.
- 3.AUDITABLE BUZZER AND RELAY OUTPUT OPTIONS ALSO AVAILABLE BY CUSTOMER REQUIREMENT.

5. USER CALIBRATION

NOTE : DON'T ENTER IN THIS MODE WITHOUT MASTER EQUIPMENT AND OPERATE BY TECHNICAL PERSON, WHO IS FAMILIAR IN USING ELECTRONIC INSTRUMENTS WITH THE HELP OF USER MANUAL.

5.1. TEMPERATURE CALIBRATION

5.1.1 : To View the ZERO ADJUST Value of Temperature , Power OFF the Instrument and Power ON by pressing  TEM. SET key till the Temperature Display Shows



5.1.2 : To Change the ZERO Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Display Shows SPAN ADJUSTMENT Value as

SPAN



0000

Previous selected SPAN ADJUSTMENT Value between (-19.99 to 19.99)

for Few Sec

5.1.3 : To Change the SPAN Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

5.2. HUMIDITY CALIBRATION

5.2.1 : To View the ZERO ADJUST Value of Humidity , Power OFF the Instrument and Power ON by pressing ▼ HUM. SET key till the Humidity Display Show

2Ero



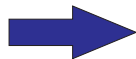
0000

Previous selected ZERO ADJUSTMENT Value between (-19.9 to 19.9)

for Few Sec

5.2.2 : To Change the ZERO Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Display Shows SPAN ADJUSTMENT Value as

SPAN



0000

Previous selected SPAN ADJUSTMENT Value between (-19.9 to 19.9)

for Few Sec

5.2.3 : To Change the SPAN Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

5.3. PRESSURE CALIBRATION

5.2.1 : To View the ZERO ADJUST Value of Pressure , Power OFF the Instrument and Power ON by pressing ► PRES. SET key till the Pressure Display Show

2Ero



0000

Previous selected ZERO ADJUSTMENT Value between (- 399 to 399)

for Few Sec

5.2.2 : To Change the ZERO Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Display Shows SPAN ADJUSTMENT Value as



Previous selected SPAN
ADJUSTMENT Value
between (-19.9 to 19.9)

for Few Sec

5.2.3 : To Change the SPAN Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

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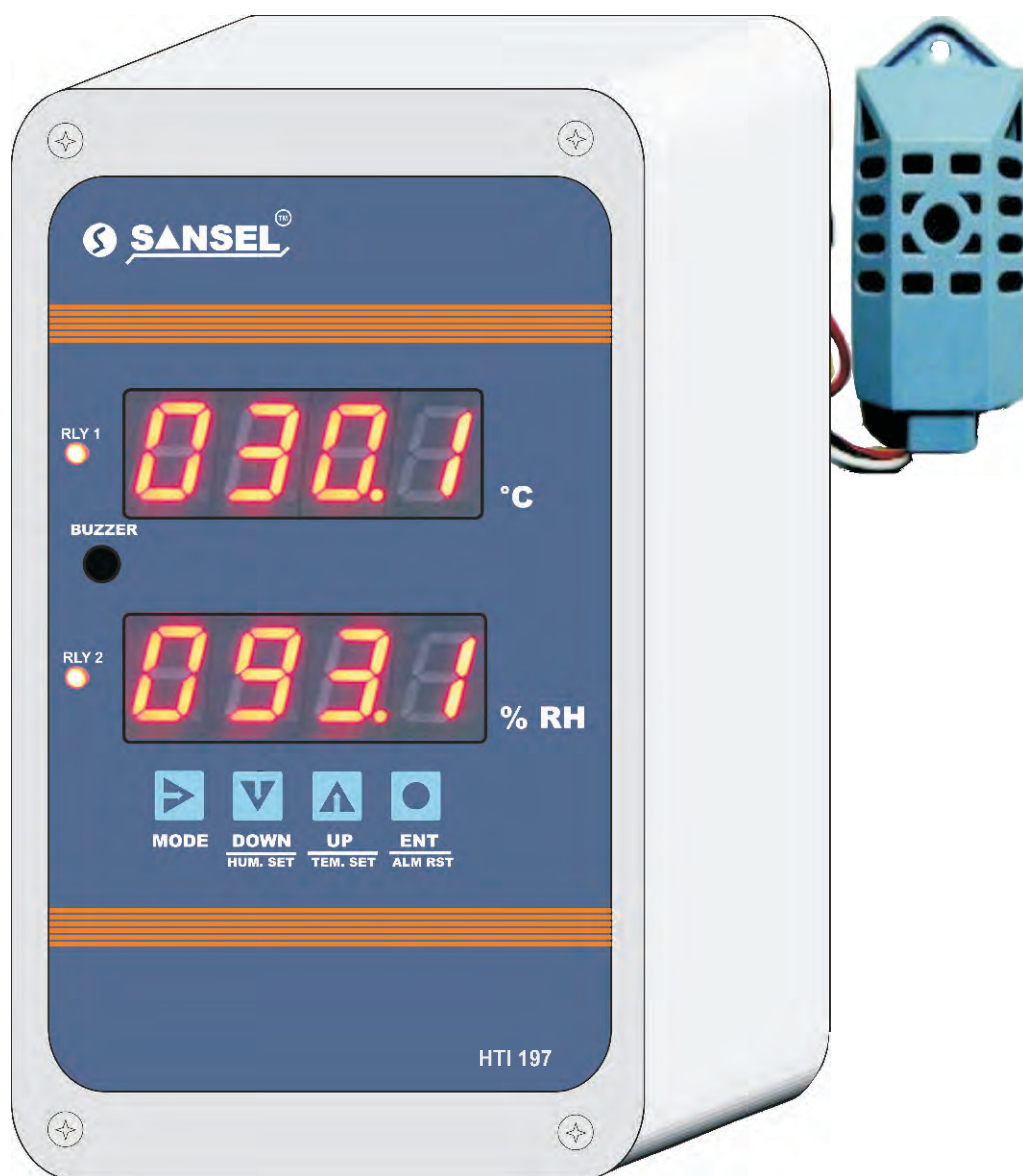


USER MANUAL

ENVIRONMENTAL MONITORING SYSTEM

HUMIDITY & TEMPERATURE

Model : HTI 197



1. Introduction

Measurement of relevant Climatic data is becoming more and more important. This Humidity & Temperature Indicator offer Very Accurate Measurement of Relative Humidity & Temperature by Excellent readability of the very High intensity Seven Segment LED Display.

The Humidity & Temperature Indicator Housed with roughest Case allow the use in tough industrial environments, Latest Technology and well Proven Sensor Guaranteed Highest Accuracy and Long Term Stable Measurement.

2. Specification

Model	HTI 197
Display	4 Digit 2 Line 0.5" Seven Segment LED Display
Range * *	0-60 °C / 0 -100%RH
Resolution *	0.1 or 0.01°C / 0.1%RH
Accuracy * * *	± 0.3°C / ± 1.5%RH
Relay Output (optional)	2 Relay 5A rated with Individual H or L Settings with Hysterisis
Mounting	Wall mountable
Dimension W x H x D	100 x 250 x 60 mm
Operating Temp.& Humd.	0 - 50°C / 20 to 95 % RH Non Condensing
Power Supply	90 to 270V AC / 50Hz
Weight	1 kg(Approx.)

Note: * Temperature resolution is provided on customer request 0.1°C or 0.01°C with different measuring

* * Temperature range (0 to 60°C, -40°C to 60°C , -40°C to 85°C and -40 °C to 125°C)

* * * Different Humidity accuracy sensor is provided on request (± 5%, ± 3%, ± 2% & ± 1.5% of FS)

Due to continuous product improvements, Published specifications may change with out notice

3. Terminal Arrangement

HUMD.RELAY OUTPUT (max. 5A rated)	NO		TEMP.RELAY OUTPUT (max. 5A rated)	NO		X	SUPPLY 90 to 270V AC		
	P	NO	P	NO	NO		L	N	E

4. Relay Setup (optional)

4.1. Temperature Set Value

4.1.1 : To View the Temperature Set Value , Press  TEM. SET key for Few Sec till the Temperature Display Shows



4.1.2 : To Change the Temp.Set Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key and the Display Automatically Return back to Read Mode.

4.2. Humidity Set Value

4.2.1 : To View the Humidity Set Value , Press  HUM. SET key for Few Sec till the Humidity Display Shows



4.2.2 : To Change the Humidity Set Value , Press  UP and  DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press  MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by  ENT Key and the Display Automatically Return back to Read Mode.

NOTES:

1. IF READ EXCEEDS THE SET VALUE THE DISPLAY WILL GET FLASH.

2.AUDITABLE BUZZER AND RELAY OUTPUT OPTIONS ALSO AVAILABLE BY CUSTOMER REQUIREMENT.

4.3. Relay Hysterisis

4.3.1 : To View the Humidity Hysterisis Value , Power OFF the Instrument and Power ON by pressing  MODE key till the Humidity Display Shows



4.3.2. To Change the Humd. Hysterisis Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Temperature Display Shows



for Few Sec

4.2.2 : To Change the Temperature Hysterisis Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

5. USER CALIBRATION

NOTE : DON'T ENTER IN THIS MODE WITHOUT MASTER EQUIPMENT AND OPERATE BY TECHNICAL PERSON, WHO IS FAMILIAR IN USING ELECTRONIC INSTRUMENTS WITH THE HELP OF USER MANUAL.

5.1. TEMPERATURE CALIBRATION

5.1.1 : To View the ZERO ADJUST Value of Temperature , Power OFF the Instrument and Power ON by pressing ▲ TEM. SET key till the Temperature Display Shows



for Few Sec

5.1.2 : To Change the ZERO Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Display Shows SPAN ADJUSTMENT Value as

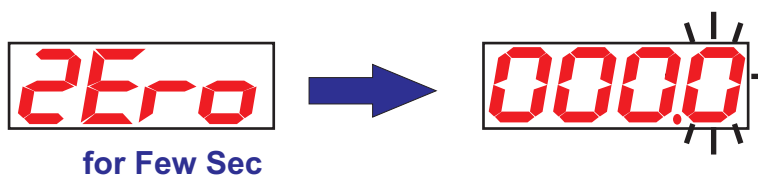


for Few Sec

5.1.3 : To Change the SPAN Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

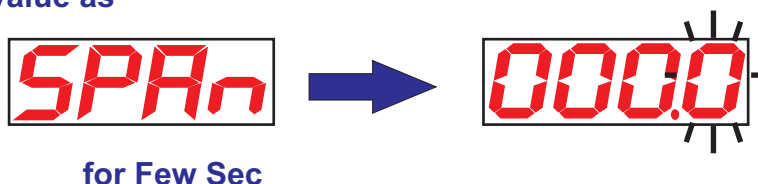
5.2. HUMIDITY CALIBRATION

5.2.1 : To View the ZERO ADJUST Value of Humidity , Power OFF the Instrument and Power ON by pressing ▼ HUM. SET key till the Humidity Display Show



Previous selected ZERO
ADJUSTMENT Value
between (-19.9 to 19.9)

5.2.2 : To Change the ZERO Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key. The Display Shows SPAN ADJUSTMENT Value as



Previous selected SPAN
ADJUSTMENT Value
between (-19.9 to 19.9)

5.2.3 : To Change the SPAN Value , Press ▲ UP and ▼ DOWN keys to select the Desire Value (Roll over the Blinking Digit between 0 - 9) and Press ► MODE Key to Next Digit Selection and Repeat the Above for all the four Digit and Select the Desire Value and Save by ■ ENT Key and the Display Automatically Return back to Read Mode.

For further clarification kindly contact us.



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